## Explanation of Plate I

Gastropod Shells from New South Wales and Queensland.

- Morula anaxeres.
- Morula biconica.
- 3. Morula margariticola.
- Morula ochrostoma. Morula uva.
- 6. Xenogalea angasi knighti.
- 7. Elegidion ticaonica.
- 8. Casmaria perryi.
- Bivona constrictor.

G. Thornley del.

## Albinism in Volutes

(Plate II)

BY NATASHA JACKSON

Melo amphora knighti, subsp. nov.

Last year I was able to send a specimen of Livonia mamilla leucostoma Mayblom to my friend, Mr. Charles Knight, Sinclair Bay, Gloucester Is., near Bowen.

He was delighted and wrote a letter of appreciation, adding cryptically, that he hoped one day to be able to reciprocate in a like manner.

I was mystified at the time, but this year he sent along two specimens of Melo amphora which had the same marked albino characteristics distinguishing Livonia mamilla leucostoma.

Hence, if Livonia mamilla leucostoma Maybloom, Umbilia hesitata howelli Iredale and Zoila thersites contraria Verco, have been given sub-specific rank, I think that the albino of Melo amphora (Solander) which exhibits similar differential features may also be given subspecific rank.

Mr. Knight was also good enough to provide very interesting data concerning this shell. He writes:

"I do not know of any specimens other than those collected by me. Habitat:

All specimens taken, have been found early in the collecting season, i.e. May-June, in sandy recesses of coral reefs, at the extreme edge of the tide or even beyond, at low spring tides that would give an approximate depth of 12 to 18 feet below water.

The reef here dips sharply at a little distance beyond low water,

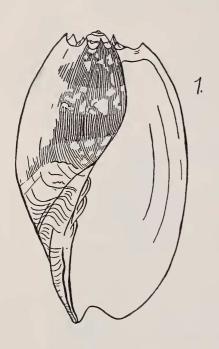
to a depth of about 7 fathoms.

This would suggest that, unlike the ordinary Melo amphora, which can be gathered all the year round, on sandy or muddy-sandy, weed covered flats, in comparatively shallow water, 6 feet or less, the "white" Melo is a deep water variety that gets caught unawares by the first low tides and then retreats into deeper water. All specimens taken by me have followed this pattern, and all have been taken from the fringing reef in Gloucester Passage, on the eastern side of Cape Gloucester.

Animal:

I have not been able to find any difference in the animal from that of the usual Melo amphora. It is not until the removal of the animal commences that one realises that one has found a "white" one. Incidence:

Over a period of eight years, during which I have systematically worked Cape Gloucester's beach, flats, banks and reefs, I have only found four live specimens, and never more than one in any year until this year, when I found the two now in your possession.





Explanation of Plate II

- 1. Melo amphora knighti.
- 2. Ericusa sowerbyi porcellana.

G. Thornley del.

## General:

All specimens of the "white" one came from an area of less than half a mile in length, where there is an unusually steep decline in the sea bed.

I think that it would be reasonable to deduce that it is by nature a deep water species, seldom found in shallow water or on exposed reefs."

The new *Melo* differs greatly from the usual form, being much more roundly ovate and more sharply angled anteriorly.

Both of my specimens are half crowned, the spikes becoming obsolete at an early age.

However, perhaps the most obvious and striking characteristic, is the china whiteness of the interior which extends over the whole of the inner lip. This albinism is also marked on the inner edges of the columella and the plaits, which, like those of the ordinary amphora, are three in number. This white glaze becomes thicker with age.

The columella near the canal, is more excavated than in the usual

Melo, giving a recurved appearance.

The protoconch also shows a degree of albinism, and, especially in the older specimen, is depressed below the crown, the succeeding whorls completely hiding it.

The back of the shell is very like that of the ordinary shell but the patterning is in distinct bands with large patches of white or near white.

The shell of the albino is much thinner than that of the usual amphora with the natural result that it is much lighter in weight.

This shell can attain a length of 15½in. and a breadth of 10½in.

I have great pleasure in naming the new shell Melo amphora, sub-species knighti, after Mr. Knight who first found it and who has helped so many collectors, not only in securing specimens of shells for their collections, but also to widen their knowledge of ecology by sharing with them his intelligent observations.

Ericusa sowerbyi porcellana, subsp. nov.

In August of last year (1952) I obtained a number of Ericusa sowerby: (Kiener) from a trawler operating in the vicinity of Gabo Island.

To my surprise, one of these proved also to be an albino.

I have had a great number of Ericusa sowerbyi myself and have seen very many more belonging to other people but this was the first "white" one.

The animal was not different from that of the usual type.

The shell itself was of the short rounded Tasmanian kind, rather than the elongated N.S.W. form called by Iredale Ericusa sowerbyi perspecta.

Again, the most striking characteristic is the interior of the shell

which is of porcellanous white, as also is the columella.

The a binism extends to a considerable portion of the body whorl

underneath.

Like Livonia mamilla leucostoma Mayblom, this shell has a striking apex. While it is not of the same dazzling whiteness as the interior, yet it is so markedly light in colour as to strike the eye immediately.

There is no lightness in weight. In fact, rather the reverse is the case, as its lip is somewhat thickened. However, this may be due to other reasons, such as a slight injury to the young shell. Or again, it may be due to the age of the shell, which is fully adult and may be approaching senility.

I think an appropriate name for this shell is Ericusa sowerbyi,

sub-species porcellana.

I wish to acknowledge with gratitude the invaluable help I received from Mr. Charles F. Knight and Miss Gertrude Thornley who drew the plate for this article and helped me with her advice.

## New Shells for New South Wales

BY LEE WOOLACOTT

(Plate III)

Superfamily MURICACEA Family THAIDIDAE Genus RHOMBOTHAIS, gen. nov. Genotype, Rhombothais arbutum, sp. nov.

Shell small, body whorl large, inflated and proportionally about two-thirds of total height, and well angled at the periphery. Columella smooth with a small longitudinal umbilical pit and a narrow, coarselyscaled flange curving to base. Sculpture of numerous small, spiral ribs bearing small, irregular and flattened scales. The interstices are moderately deep and narrower than the ribs. There are several medium-sized nodules on the periphery of each whorl. A smooth, sub-